

## ANAESTHESIA CONTROL SYSTEM

## **Abstract of the Disclosure**

An anaesthesia control system and a method of calculating an index representative of the depth of anaesthesia is disclosed. The method comprises subjecting a patient to a repetitive audio stimulus and monitoring auditory evoked potentials (AEP) produced by the patient and then recording these auditory evoked potentials using EEG recording means and providing a signal corresponding to the coarseness of the monitored AEP signal and using this signal as an index indicative of anaesthetic depth. The raw AEP signal is divided into a series of sweeps and each sweep is synchronized with the repetitive audio stimulus and sweeps are recorded in sequence to produce a time averaged sweep from which the anaesthetic index is calculated. The anaesthetic index is constantly updated by repeatedly conducting a successive series of sweeps. The system and index signal can be used as part of an anaesthesia control system for regulating the supply of anaesthetic to the patient to maintain the anaesthetic index at a predetermined level.

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